5

10

15

20

INSERT-MOLDABLE HEAT SPREADER, SEMICONDUCTOR DEVICE USING SAME, AND METHOD FOR MANUFACTURING SUCH SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

A heat spreader adapted to be insert-molded with resin on a surface of a circuit board on which a semiconductor chip is mounted so that the heat spreader covers the surface of the circuit board including an upper surface of the semiconductor chip over substantially a same area as that covered with molded resin when insert-molded with resin. The heat spreader has a main-portion which defines a larger gap with respect to the surface of the circuit board when insert-molded with resin and a sub-portion which defines a smaller gap with respect to the surface of the circuit board when insert-molded with resin. The sub-portion is embedded in the mold resin when insert-molded with resin so that the heat spreader is strongly adhered to the resin.